

AMENDMENTS TO THE SPECIFICATION

Before paragraph [0001], please insert:

This application is the US national stage filing of International Application No. PCT/EP2005/000494 filed January 19, 2005, which claims priority to German patent application no. 10 2004 003 087.1 filed January 21, 2004.

TECHNICAL FIELD

Please add the following new section heading after paragraph [0001]:

BACKGROUND ART

Please add the following new section heading after paragraph [0002]:

SUMMARY

Please replace paragraphs [0004]-[0009] with the following paragraphs:

[0004] ~~A method, by which this object is solved, is characterized by the features of claim 1. With the inventive method, a separate steering actuator can be omitted. The wheels of the vehicle are not turned to change the vehicle direction, but rather varying torque is applied to the wheels. In one aspect of the present teachings, methods are taught for guiding a driverless, multi-track vehicle along a predetermined path, which vehicle rolls on wheels separated from each other in the vehicle width direction, wherein the vehicle is steered such that the vehicle follows the predetermined path. The vehicle is preferably steered by changing the torque applied to at least one of its wheels. With this method, a separate steering actuator can be omitted,~~

because the wheels of the vehicle are not turned to change the vehicle direction. Instead, varying torque is applied to the wheels to change the vehicle direction.

[0005] The dependent claims 2 to 5 are directed to advantageous performance modes of the inventive method. More preferably, at least one wheel is braked to change the vehicle direction. Furthermore, the drive torque of the vehicle is preferably increased in correspondence to the braking moment, so that the speed of the vehicle is not changed by a brake intervention for steering the vehicle. In this respect, at least two wheels disposed on different sides of the vehicle may be driven by their own motors whose drive torque is changed for steering the vehicle. More preferably, the drive torques of the motors may be changed such that the total drive torque of the vehicle remains constant during a steering intervention.

[0006] The subject matter of claim 6 is a multi-track vehicle that can be used for cost-effective performance of crash tests. In another aspect of the present invention, a multi-track vehicle guidable along a predetermined path preferably includes at least one drive apparatus for driving at least one vehicle wheel. A braking apparatus is preferably provided for selective braking of at least two wheels disposed on different sides of the vehicle and a steering apparatus is preferably provided for changing the driving direction of the vehicle. A guiding device may ascertain a deviation of the actual path of the vehicle from a predetermined path and a control device preferably controls the operation of the vehicle such that the vehicle moves with a predetermined speed along the predetermined path. Even more preferably, the steering device may be formed by the braking apparatus that brakes the wheels when there is a deviation between the actual path and the predetermined path such that the deviation between the actual path and the predetermined path is minimized.

[0007] The inventive vehicle is further developed in an advantageous way with the features of claim 7. In a preferred embodiment of this aspect, the drive apparatus, the braking apparatus and the steering apparatus are preferably formed by at least two selectively controllable motors that drive the wheels disposed at different positions of the vehicle. The motors are preferably

controlled by the control device such that, when there is a deviation between the actual path and the predetermined path, the vehicle changes its direction by selectively changing the moments acting upon the wheels such that the deviation decreases.

[0008] With the features of claim 8, a cost effective option is created for performing tests, by which a drivable barrier is moved into the side of a preferably standing vehicle in order to test its side crash capability. The vehicle may preferably carry a barrier designed for a collision with another vehicle.

[0009] Claim 9 identifies the overall design of an inventive system for performing crash tests. In another aspect of the present teachings, a system for performing crash tests may be provided by applying one or more of the above-described methods and by using at least one of the above-described vehicles. In this case, a guide apparatus preferably defines a predetermined path and a speed control apparatus cooperates with the vehicle for controlling the vehicle speed such that the vehicle follows the predetermined path with a predetermined speed progression. The guide apparatus may preferably comprise a navigation apparatus that works by measuring distances between the vehicle and predetermined reference locations.

Please replace paragraph [0012] with the following new paragraph:

In the drawings are shown:

Fig. 1 a schematic drawing of a first embodiment of an inventive system.

Fig. 2 a schematic drawing of a second embodiment of an inventive system.

BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 shows a schematic drawing of a first embodiment of an inventive system.

Fig. 2 shows a schematic drawing of a second embodiment of an inventive system.

DETAILED DESCRIPTION OF THE INVENTION